

CLAIMS

1. A vaccine composition comprising at least one group A Streptococcal
5 antigen and a proteosome adjuvant.

2. A vaccine composition according to claim 1 wherein the antigen
comprises an *S. pyogenes* M protein peptide.

10 3. A vaccine composition according to claim 1 wherein the antigen
comprises a fragment of the M protein from the C-terminal region of between 6 and
25 amino acids in length.

4. A vaccine composition according to claim 1 wherein the antigen has
15 the sequence ASREAKKQVEQKALE.

5. A vaccine composition according to claim 2 wherein the antigen
is flanked by amino acid sequences to maintain helical folding of the antigen.

20 6. A vaccine composition according to claim 5 wherein the peptide
antigen has the sequence KQAEKVKASREAKKQVEKALEQLEDKVK.

7. A vaccine composition according to claim 1 wherein the antigen is
selected from an MtsA peptide or a protein H peptide.

25

8. A vaccine composition according to claim 1 wherein the antigenic
peptide further comprises a C- or N-terminal hydrophobic moiety for insertion of the
antigenic peptide into proteosome adjuvant vesicles.

30 9. A vaccine composition according to claim 1 for parenteral or oral
administration.

10. A vaccine composition according to claim 9 for intranasal administration.

5 11. A vaccine composition according to claim 1 for use in the treatment or prophylaxis of a group A Streptococcal infection in an individual.

12. A vaccine composition according to claim 11 wherein the composition is administered intranasally to the individual.

10 13. A vaccine composition according to claim 11 wherein administration of the composition to the individual induces a mucosal immune response.

14. A vaccine composition according to claim 11, wherein administration
15 of the vaccine composition induces a serum immune response.

15. A vaccine composition according to claim 11 wherein the vaccine composition is administered intranasally to the individual and treatment or prophylaxis of group A Streptococcal infection is produced via reduction or
20 prevention of bacterial colonisation of the throat.

16. A method of treatment of prophylaxis of group A Streptococcal infection in an individual comprising administering a vaccine composition according to claim 1 to the individual.

25 17. A method according to claim 16 wherein said vaccine composition is administered intranasally to said individual.

18. A method according to claim 17 wherein the treatment or prophylaxis
30 group A Streptococcal infection is produced via prevention or reduction of bacterial colonisation of the throat.